

An X- and gamma-ray view of the sky region around SNR G69.7+1.0

Tuesday 3 September 2024 17:15 (15 minutes)

In recent years the number of known sources emitting in the TeV-PeV regime has increased significantly thanks to facilities like LHAASO and HAWC. These observations could change our understanding of high-energy processes in our Galaxy. However, many of the observed sources are still unidentified or poorly constrained due to the limited angular resolution of these instruments, and most of the TeV sources are not easily associable with lower-energy counterparts.

In this contribution, we present the first XMM-Newton observation of the sky region around the shell-type radio supernova remnant SNR G69.7+1.0, which recently attracted significant interest due to its spatial coincidence with one of the LHAASO sources emitting at hundreds of TeV.

We also present a reanalysis of Fermi-LAT data, that show the presence of a source spectrally consistent with a pulsar, and a multiwavelength modelization of the whole region.

Primary author: RIGOSELLI, Michela (Istituto Nazionale di Astrofisica (INAF))

Co-authors: BONOLLO, Alberto (Istituto Nazionale di Astrofisica (INAF)); Dr GIULIANI, Andrea (Istituto Nazionale di Astrofisica (INAF)); Dr MEREGHETTI, Sandro (Istituto Nazionale di Astrofisica (INAF)); CRESTAN, Silvia (Istituto Nazionale di Astrofisica (INAF))

Presenter: RIGOSELLI, Michela (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Parallel 1